

MASTER PLUMBER

PURPOSE: To properly plan, lay out, and supervise the installation and repair of apparatus and equipment for plumbing, heating, ventilation, irrigation, and related systems.

FUNCTIONAL AREAS:

1. Perform skilled plumbing work in the installation, maintenance, and repair of plumbing, heating, ventilation, irrigation, and related systems.
 - * A. Install, maintain, and make repairs to plumbing, heating, water, and sewer systems in City structures; and assume accountability for conformance with minimum code standards.
 - * B. Install, maintain, and make repairs to all plumbing and related appurtenances.
 - * C. Install wash basins, urinals, toilet bowls, and toilet tanks.
 - * D. Perform all types of piping joints and hanger installation.
 - * E. Install and make repairs to lawn sprinkler systems.
 - * F. Determine modifications required when obstructions are met while installing plumbing/heating/ventilation systems.
 - * G. Maintain and make repairs to ventilation systems.
 - * H. Ensure a safe work environment.
 - * I. Prepare seasonal plumbing systems by winterizing as required.
 - * J. Operate power and hand tools and motorized equipment.
 - * K. Attend related training sessions.
 - * L. Assist other tradespersons as necessary.
2. Organize and direct activities of assigned personnel.
 - * A. Review and interpret blueprints, develop materials lists, and determine costs.
 - * B. Estimate time and materials necessary to perform a job.
 - * C. Assist with inspections of new installations, repairs, and/or modifications performed by others.
 - * D. Obtain plumbing permits for the City of Duluth when required.
 - * E. Secure meter applications when required.
 - * F. Direct and check the work of journeypersons and helpers as assigned.

JOB REQUIREMENTS

1. **LICENSE:**
 - ❖ A. Possession of a State of Minnesota Master Plumber license.
 - ❖ B. Possession of a Minnesota 1st Class Engineer license.
 - ❖ C. Possession of a valid Minnesota driver's license or equivalent.
2. **EXPERIENCE:**
 - ❖ Two (2) years of verifiable full-time experience as a licensed Master Plumber or equivalent.
3. **KNOWLEDGE:**
 - ❖ A. Extensive knowledge of Minnesota plumbing codes.
 - ❖ B. Extensive knowledge of all other laws and rules regulating plumbing practices.
 - ❖ C. Extensive knowledge of the techniques, tools, equipment, and materials used in the plumbing trade.

- D. Knowledge of hydraulics as related to flow rates, pipe sizes, and water pressure.
- ❖ E. Knowledge of wiring involved with heating, ventilation, and cooling controls.
- ❖ F. Knowledge of pneumatic controls.
- ❖ G. Knowledge of various types of pumps involved in plumbing, heating, ventilation, and cooling.
- ❖ H. Knowledge of the methods used in the installation, operation, and maintenance of irrigation systems.
- I. Knowledge of sheet metal and ducting.
- ❖ J. Knowledge of applicable safe work practices and procedures.

4. SKILLS:

- ❖ A. Skill in the installation, operation, and maintenance of plumbing systems and fixtures.
- ❖ B. Skill in the installation, operation, and maintenance of steam and hot water heating systems.
- ❖ C. Skill in the installation, operation, and repair of oil and gas warm air heating systems.
- ❖ D. Skill in the operation and maintenance of aquatic pools, including filtration systems, circulation pumps, injection pumps, and related equipment.
- ❖ E. Skill in the operation and maintenance of decorative fountains.
- ❖ F. Skill in the operation of large compressors (up to 1000 CFM), generators, and power threading equipment.

5. ABILITIES:

- ❖ A. Ability to read and interpret blueprints, diagrams, and manuals.
- ❖ B. Ability to calculate materials costs.
- ❖ C. Ability to estimate time and materials necessary to complete a job.
- ❖ D. Ability to weld/braze.
- ❖ E. Ability to perform mechanical work, especially that involved in plumbing.
- ❖ F. Ability to understand and follow oral and written instructions.
- ❖ G. Ability to direct helpers.
- ❖ H. Ability to erect ladders and scaffolding and operate scissors lifts, boom trucks, and related devices in a safe manner.
- ❖ I. Ability to use power hand tools.
- ❖ J. Ability to recognize safety hazards and to take appropriate precautions.
- ❖ K. Ability to establish and maintain effective working relationships with co-workers, subordinates, and the general public.
- ❖ L. Ability to attend work on a regular basis.

6. PHYSICAL ABILITIES:

- ❖ A. Ability to stand, walk, kneel, crouch, stoop, and crawl as needed to perform plumbing activities.
- ❖ B. Ability to lift and transport (usually by carrying) supplies, tools, and equipment such as a power threader weighing 90 pounds.

- * Essential functions of the classification.
- ❖ Minimum requirements necessary on the first day of employment.

Generalist: CT	Class: 1820	Union: Basic	Pay: 31	CSB: 20111004
CC: 20111114	Res: 11-0576R	EEOC: Skilled Craft	EEOF: Admin/Finance	WC: 5183